

VCU 02-14  
Amendment dated 09/17/2007

10/565,852  
Reply to office action mailed 06/15/2007

The following is a complete listing of all claims in the application, with an indication of the status of each:

**Listing of claims:**

- 1        1. (currently amended) An apparatus for measuring intra cranial pressure,  
2        comprising:
  - 3                an acoustic eye patch conformably adapted to an eyeball of a patient,  
4                said eye patch having sensors for measuring acoustic signals in the brain;
  - 5                a sweep generator for applying acoustic signals to the brain across the  
6                skull of the patient, said signals sweeping a predetermined range;
  - 7                an analyzer for determining from an output of the acoustic eye patch  
8                an intra cranial pressure.
- 1        2. (original) The apparatus of claim 1, wherein said predetermined range is  
2        an ultrasonic resonance range and said analyzer determines a resonant  
3        frequency and a degree of damping of the acoustic signal at said resonant  
4        frequency, and wherein said degree of damping is correlated to a measure of  
5        intra cranial pressure.
- 1        3. (currently amended) The apparatus of claim 1, wherein the acoustic eye  
2        patch is adapted to be applied to both eyeballs of the patient.
- 1        4. (original) The apparatus of claim 2, wherein the predetermined resonance  
2        range is 20-175 kHz.

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1       5. (original) The apparatus of claim 1, wherein the acoustic eye patch sensor  
2       is a piezoelectric film.

1       6. (original) The apparatus of claim 3, wherein the analyzer determines  
2       coherence between eyeballs of the patient.

1       7. (original) The apparatus of claim 1, wherein said predetermined range  
2       includes frequencies less than 20 kHz and said analyzer detects retinal artery  
3       pulsations, and wherein pressure is applied to the eye until the retinal artery  
4       pulsations disappear, said applied pressure being a measure of intra cranial  
5       pressure.

1       8. (currently amended) A method for determining intra cranial pressure,  
2       comprising the steps of:

3           conformably adapting an acoustic eye patch to an eyeball of a patient,  
4       said eye patch having sensors for measuring acoustic signals in the brain;

5           applying acoustic signals to the brain across the skull of the patient,  
6       said signals sweeping a predetermined range;

7           determining from an output of the acoustic eye patch an intra cranial  
8       pressure.

1       9. (original) The method of claim 8, wherein said predetermined range is an  
2       ultrasonic resonance range and said analyzer determines a resonant frequency  
3       and a degree of damping of the acoustic signal at said resonant frequency, and  
4       wherein said degree of damping is correlated to a measure of intra cranial  
5       pressure.

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1        10. (original) The method of claim 8, wherein the acoustic eye patch is  
2        applied to both eyeballs of the patient.

1        11. (original) The method of claim 9, wherein the predetermined resonance  
2        range is 20-175 kHz.

1        12. (original) The method of claim 8, wherein the acoustic eye patch sensor  
2        is a piezoelectric film.

1        13. (original) The method of claim 10, wherein the analyzer determines  
2        coherence between eyeballs of the patient.

1        14. (original) The method of claim 8, wherein said predetermined range  
2        includes frequencies less than 20 kHz and said analyzer detects retinal artery  
3        pulsations, and wherein pressure is applied to the eye until the retinal artery  
4        pulsations disappear, said applied pressure being a measure of intra cranial  
5        pressure.